

REMARKS

The foregoing amendment amends claims 1 and 17. Pending in the application are claims 1-21, of which claims 1 and 17 are independent. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above, in condition for allowance.

Claims 1 and 17 are amended to specify that the gas channel bends around an end portion of the extended portion of the sealing member. Support for the amendment can be found throughout the application as filed, at least, for example, on page 5, lines 2-8, page 9, lines 2-11 and in Figures 1-4, 10-13, 16 and 18. *No new matter is added.*

Amendment and/or cancellation of the claims are not to be construed as an acquiescence to any of the objections/rejections set forth in the instant Office Action, and were done solely to expedite prosecution of the application. Applicants reserve the right to pursue the claims as originally filed, or similar claims, in this or one or more subsequent patent applications.

Claim Rejections Under 35 USC § 102

Applicants thank the Examiner for the withdrawal of the previous rejection of claims 1 and 6 under 35 U.S.C. § 102(b). In the present Office Action, claims 1-21 are rejected under 35 U.S.C. § 102(e) as being anticipated by Nishida (JP 2000-021418). Applicants respectfully traverse the rejection for the following reasons.

The Nishida reference does not disclose a sealing member having an extended portion that extends seamlessly from a circumferential portion across a *significant* portion of a reactant gas channel, as recited in independent claim 1. In the Nishida reference, which corresponds to Figure 19 of the present application and the corresponding description, a gasket portion on a fuel cell separator includes connecting members (i.e., the phenol projecting parts 5 and joint members 15) that abut protruding members 3 or 2 of the separator to form a boundary portion of a gas channel. The connecting members of the gasket form a boundary portion or sidewall of the gas channel only along a *peripheral edge* of the separator, while the protruding members of the

separator, which is not a sealing member, define a boundary portion or sidewall of the gas channel across the surface of the separator. In contrast to the claimed invention, the connecting members of the gasket of Nishida merely extend a nominal, non-significant distance from one end of the gasket portion. Therefore, Applicants submit that the Nishida reference lacks a teaching of an extended portion of a sealing member that extends from a circumferential portion across a *significant* portion of a gas channel, as recited in claim 1.

The Nishida reference also does not disclose a sealing member capable of directing the flow of a fluid flowing along the gas channel, as also recited in independent claim 1. The connecting members of the gasket described in Nishida only extend as far as the end of the protrusions on the separator forming the gas passages, without extending sufficiently far enough to be able to direct fluid flow. The connecting members of Nishida are incapable of actually directing the flow of a fluid flowing along the gas channel, as recited in claim 1. Rather, only the *protrusions* of the separator direct the flow of the fluid along the gas channel, not the connecting members of the gasket.

The Nishida reference also does not disclose a seal member having an extended portion that extends seamlessly *between* two surface features on the first separator, as recited in independent claim 17 and dependent claims 7, 13-16, and 20-21. The term “surface features” includes both grooves and protruding members. This recitation specifies that the extended portion is not a top or bottom peripheral edge of the sealing member. As shown, in Figure 2 and 3 of Nishida and described in the “Background” section of the present application, the connecting members of the gasket in Nishida abut, but clearly do not extend *between* the protruding members on the separator. The connecting members extend only in an area that the protruding members are absent.

The Nishida reference further does not disclose a gas channel that bends around an end portion of an extended portion of a sealing member, as also recited in claims 1 and 17. According to an embodiment of the invention, the sealing member in the claimed fuel cell includes a circumferential portion and an extended portion. A turning portion of the gas channel is formed around the extended portion. For example, in one embodiment, shown in Figure 1, a

connecting path 201 of the gas channel 211 is formed around the end portion of the extended portion CS1 of the sealing member CS. Various other embodiments, particular those shown in Figures 2-4, 10-13, 16 and 18, illustrate a gas channel bending around an end portion of a sealing member extended portion, a feature clearly lacking in Nishida. In fact, the gas channel in Nishida cannot bend around the end of an extended portion of a sealing member, because the protruding members 3 of the separator in Nishida connect to and abut the end of joint portion 15 of the gasket connecting member, thereby preventing the gas channel from bending around the end of the joint portion 15. In contrast to the claimed invention, the gas channel of Nishida only bends around the end of one of the separator protrusions. The Nishida reference therefore clearly does not disclose all of the elements of independent claims 1 and 17.

The dependent claims recite additional limitations not taught or suggested in the prior art. For example, the Nishida reference fails to disclose a fuel cell having an extended portion of a seal member that forms a boundary portion for directing flow of the fluid along a significant portion of the reactant gas channel, as recited in claims 8-10. Rather, the connecting members of the gasket in Nishida extend only a small amount and do not direct fluid flow through a gas channel.

The Nishida reference also fails to disclose an extended portion of a sealing member that extends between a pair of a plurality of passage units, as described in claims 11 and 12.

The Nishida reference also fails to disclose a gas channel formed by a first and second linear portions separated by an extended portion of a seal member, as recited in claims 18-19. The cited references further do not teach or suggest an extended portion of a sealing member that defines a connecting path for connecting a first linear portion and a second linear portion of a gas channel between an end of the extended portion and a circumferential portion of the sealing member, as set forth in claim 19.

For at least these reasons, the Nishida reference fails to disclose all of the elements of the claimed invention. As such, Applicants request that the rejection in view of Nishida be reconsidered and withdrawn.

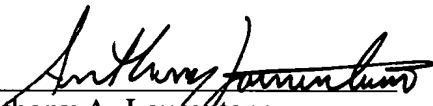
CONCLUSION

In view of the above amendment, applicants believe the pending application is in condition for allowance.

A Petition for a two-month extension of time is being filed concurrently herewith. Applicants believe no additional fee is due with this Amendment. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. SIW-016RCE from which the undersigned is authorized to draw.

Dated: January 26, 2005

Respectfully submitted,

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